(No Model.)

J. B. MAY.

GATE.

No. 318,386. Patented May 19, 1885.

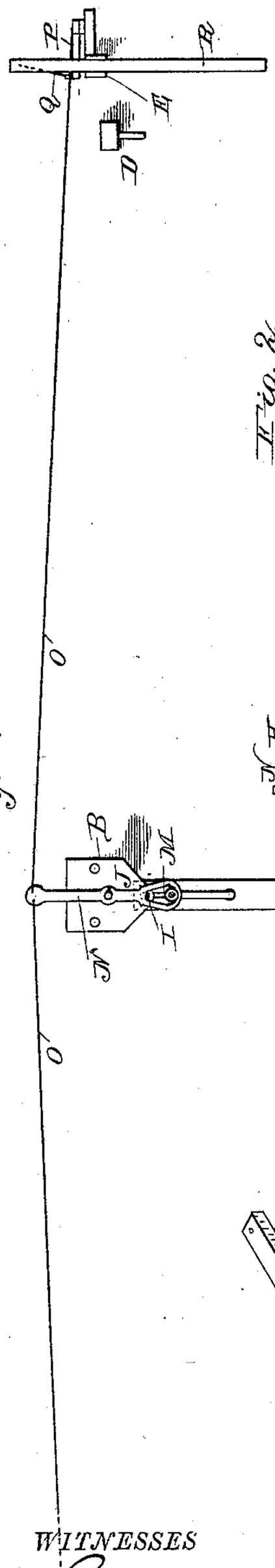

Fig. 1.

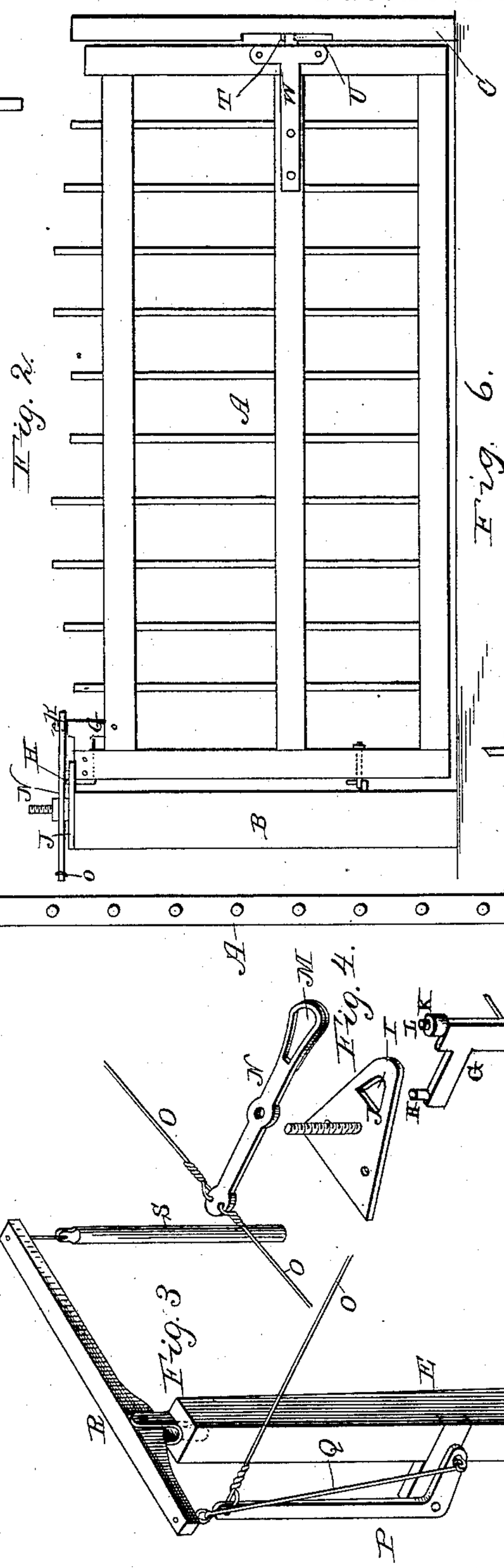

Fig. 2.

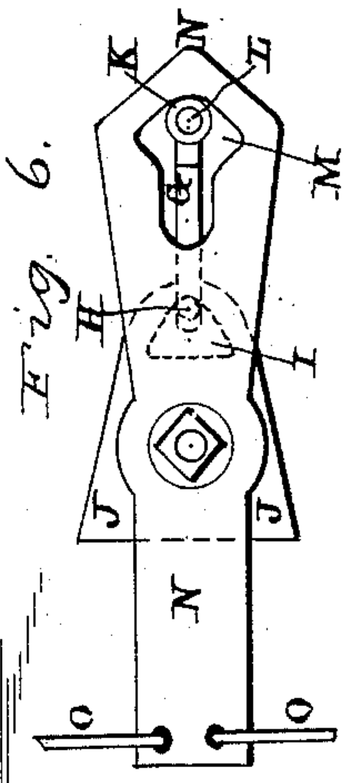

Fig. 6.

Fig. 3.

Fig. 4.

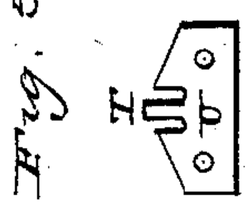

Fig. 5.

WITNESSES

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GATE.

SPECIFICATION forming part of Letters Patent No. 318,385, dated May 19, 1885.

Application filed November 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. MAY, of Lexington, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in gates; and it consists, first, in the combination of the gate, the casting secured to its inner and upper end and provided with a pintle at one corner and a projection at the other, the plate secured to the post upon which the gate is hung and provided with an opening to receive the pintle, and the operating-lever having an opening at its front to catch over the projection on the casting on the gate and connected at its rear end to the operating-wires; and, second, in the combination of the operating-lever for opening and closing the gate, the connecting-wires, the cranked levers to which the wires are connected, connecting-rods, and the pivoted levers, as will be more fully described hereinafter.

The object of my invention is to provide a gate which can be opened and closed at a distance without having to dismount from the vehicle, and in which the operating parts are so constructed and arranged that a very slight pull will cause the gate to be thrown wide open.

Figure 1 is a plan view of a gate embodying my invention; Fig. 2, a side view of the same. Fig. 3 is a detached view of one of the levers for opening and closing the gate. Fig. 4 is a detached view of the castings. Fig. 5 is a detached view of the casting which forms part of the latch. Fig. 6 is an enlarged plan view of the castings applied to the upper and inner corner of the gate.

A represents the gate; B, the post to which the gate is hinged; C, the post against which the gate closes; D, the posts placed upon each side of the gate and against which the gate swings when open, and E the posts upon which the levers are placed for the purpose of opening and closing the gate, all of these parts being arranged to operate in the usual manner.

Secured to the upper and inner corner of the gate is a casting, G, which is rigidly bolted both to the inner upright of the gate and to the top piece or rider, as shown. This casting serves the double purpose of bracing the gate so that it cannot sag, and as a part of the hinge. Upon the inner end of this casting is formed the pintle H, which passes up through a triangular opening, I, which is formed in the plate J, which is secured upon the top of the post B. The opening I is made much larger than the pintle H, for the purpose of allowing the front end of the gate to rise freely upward as the latch W is passing up one of the inclines on the casting U, and to drop downward when the gate is opened, so as to swing freely around. If the opening was just large enough to receive the pintle H, the gate would be held rigidly so far as any vertical movement of the free end of the gate is concerned, and hence would not swing freely. Upon the outer opposite corner of the casting is formed a projection, K, upon which is placed a friction-roller, L, and this projection and roller pass up through the opening M in the inner end of the operating-lever N. The opening M is made widest at its front end and oblong in shape, so that when a pull is exerted through one of the wires O upon the rear end of the lever, the lever will first push the inner corner of the gate sidewise and then exert a backward pull, so as to disengage the latch. When the latch is rising upon one of the inclines, the projection K moves backward in the opening. This lever N is pivoted upon the top of the post B, and has the usual connecting rods or wires, O, fastened to its outer end, which rods or wires extend in opposite directions, as shown. The outer ends of the wires or cords are fastened to the upper ends of the crank-levers P, which are pivoted upon suitable supports which are secured to the posts E. The opposite ends of these crank-levers are attached by means of suitable operating-rods, Q, to levers R, which are pivoted upon the posts E. The bearings in which these levers R are pivoted are swiveled in the tops of the posts E, so that

the levers will have a free universal movement for the purpose of allowing them to be moved into any position which will be most convenient, and to follow the movement of the vehicle or rider as the operator moves forward. Where the lever is pivoted in only a single position and has no swinging or swivel movement, the rider or driver must stop for the purpose of opening or closing the gate.

To the longer ends of the levers R are attached suitable hangers, S, which the operator catches hold of for the purpose of operating the levers and opening or closing the gate.

By means of the crank-levers above described a very slight pull upon one of the levers R is made to give the gate a sufficient throw to cause the gate to open or close.

The gate is provided with an ordinary spring-latch which catches on either side of the double catch T, which is provided for this purpose.

In order to provide the catch both with an additional means for stopping it when it swings shut, and to support the gate while it is closed so that it will not sag downward, the casting U is secured to the inner side of the post C. At the center of this opening is formed a suitable stop or flange, against which a flange upon the casting W, secured to the edge of the gate, is made to strike. The top of the casting U is inclined downward in opposite direction from the central flange so that the flange upon the casting which is secured to the gate will ride freely over it. The two castings together serve to retain the gate in a horizontal position while it is closed, and thus prevent the sagging of the gate at its outer end.

Having thus described my invention, I claim—

1. The combination of the gate, the casting G, secured to its inner and upper end and provided with a pintle at one corner and a projection at the other, the plate J, secured to the post B and provided with an opening to receive the pintle, and the operating-lever N, having an opening at its front to catch over the projection K and connected at its rear end to the operating-wires, substantially as shown.

2. The combination of the operating-lever N, for opening and closing the gate, the connecting cords or wires, the cranked levers P, to which the wires are connected, the connecting-rods Q, and the levers R, pivoted upon the posts E, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH B. MAY.

Witnesses:
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